

Abstract of the Disclosure:

A method makes contact with a doping region formed at a substrate surface of a substrate. An insulating layer is applied on the substrate surface and a contact hole is formed in the insulating layer. A metal-containing layer is subsequently deposited on the insulating layer and the surface region of the doping region that is uncovered by the contact hole. In a subsequent thermal process having two steps, first the metal-containing layer is reacted with the silicon of the doping region to form a metal silicide layer and then the rest of the metal-containing layer is converted into a metal-nitride-containing layer in a second thermal step.

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